

Expro Excellence

Expro assists in improving field management

Well Flow Management | Flow Surveillance



Objectives and background

- GUPCO/Dragon Oil company is one of the largest hydrocarbon producing joint ventures (JV) in Egypt. GUPCO/Dragon Oil operates various black oil offshore fields mainly located in the Gulf of Suez
- These fields are old and mature and GUPCO/Dragon Oil continues to maximize production while minimizing capital investment in the assets
- GUPCO/Dragon Oil wanted access to a reliable non-intrusive flow metering solution across all process conditions without any facility modifications in order to facilitate inline metering where no existing metering was available. A specific project was reservoir injectivity performance assist with pressure support management
- The customer wanted to optimize gas-lift measurements, monitor water injection to the reservoir at the wellhead and facilities whilst determining the surface flow line network capacity

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- Traditional testing methods were not feasible in terms of operational efficiency as well as costs due to the requirement of flow line shut-in and space constraints on the platforms
- Expro ActiveSONAR™ flow meters were deployed to GUPCO/ Dragon Oil facilities both on and offshore in a range of sizes from 2-inch to 24-inch
- Work was performed efficiently across a large number of locations without disruption to ongoing production activities
- 46 tests were carried out over a six week period with up to two tests being successfully performed each day (12 hour shifts)

Value to the client

- Small footprint and operational efficiency allowed the same flow lines to be tested at different locations (from platform to platform) allowing for a better understanding of the subsea pipeline network and detection of potential leakage subsea
- OPEX vs CAPEX by avoiding permanent facility modifications
- Portable power supply and pressure/temperature gauges allowed the operation to be independent of platform utilities
- The reporting of preliminary data was within 24 hours and delivery of the final report was within 72 hours on average
- The availability of injection data allowed GUPCO/ Dragon Oil to improve their reservoir field management, validate assumptions for their reservoir simulation, and flow performance models

